MEDIA RELEASE

McAlester Army Ammunition Plant

For Immediate Release

Release No.: 0011-11/October 19, 2011

Point of Contact: Mark Hughes/918-916-0667

Ammunition plant uses sound waves to mix explosives

MCALESTER, Okla.--Using sound waves to mix plastic bonded explosives is in a laboratory testing phase at McAlester Army Ammunition Plant, according to Treaver Price, chemist at the plant.

However, the new process, if fully successful, could be used to produce large amounts of a variety of plastic bonded explosive (PBX). Currently PBX is the only explosive that can be created using the acoustic mixer.

The acoustic mixer eliminates the current method of mixing explosives using steel blades which, although very unlikely, could cause unsafe pinch points. The Resonance Acoustic Mixer© (RAM) uses acoustic sound waves which accelerates the explosive particles into a mixing motion. The RAM is a table top model that can produce two pounds of high explosives. National laboratories like Los Alamos, Lawrence Livermore and Sandia also have the table top model.

Another advantage of acoustic mixing is the ability to obtain a better mix quicker. The old system would take up to three hours to process the explosive while a similar quantity using the acoustic mixer would accomplish the same thing in about 20 minutes.

McAAP's technical team was so impressed with the results of the table top model, that a five gallon version was ordered which will be used in production of a variety of PBX. MCAAP is only one of two installations in the U.S. Army to be funded for the larger version which can produce up to about 70 pounds of high explosives in one batch and could be used in future production of warheads and bombs.

McAlester Army Ammunition Plant is the Department of Defense's premier bomb and warhead loading facility and is one of 15 installations under the Joint Munitions Command in Rock Island, Ill.

-30-